

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

ROVI GUIDES, INC., et al.,
Plaintiffs,

-v-

COMCAST CORPORATION, et al.,
Defendants.

16-CV-9278 (JPO)

OPINION AND ORDER

J. PAUL OETKEN, District Judge:

Plaintiffs Rovi Guides, Inc., Rovi Technologies Corp., and Veveo, Inc. (collectively, “Rovi”), which are all subsidiaries of the same media-technology company, bring this patent action against digital-content services provider Comcast Corporation and six of its subsidiaries (collectively, “Comcast”).¹ (Dkt. No. 68 ¶¶ 10–20.) As relevant here, Rovi contends that certain features of the digital platforms through which Comcast enables its subscribers to locate content they wish to access infringe various claims of U.S. Patent Number 8,122,034 (the “’034 patent”), a patent in which Rovi (specifically, Veveo, Inc.) holds the rights. (Dkt. No. 68 ¶¶ 360–405.) Comcast has moved for summary judgment of noninfringement on Rovi’s ’034 patent claims (Dkt. No. 385) and has moved to strike certain materials Rovi has filed in opposition to summary judgment (Dkt. No. 402). For the reasons that follow, Comcast’s motion to strike is denied, and its motion for summary judgment as to the ’034 patent is granted in part and denied in part.

¹ The defendant subsidiaries are Comcast Cable Communications, LLC; Comcast Cable Communications Management, LLC; Comcast of Houston, LLC; Comcast Business Communications, LLC; Comcast Holdings Corporation; and Comcast Shared Services, LLC.

I. Background

Although this litigation involves claims related to a number of Rovi's patents, the present motions relate exclusively to the '034 patent. The Court first explains the procedural posture in which these motions arise and then provides some factual background on the '034 patent and the specific claim limitations that are presently at issue.

A. Procedural Background

Rovi initiated this patent action in the United States District Court for the Eastern District of Texas on April 1, 2016 (Dkt. No. 1), and the case was transferred to this Court on October 25, 2016 (Dkt. No. 182).² The operative complaint in this case alleges that certain products and services offered by Comcast to its subscribers infringe various claims of eight patents in which Rovi holds the rights.³ (Dkt. No. 68 ¶¶ 38, 117–492.) Over the course of this litigation, though, the number of patents in play has dropped to four: Rovi has voluntarily dismissed all claims related to three of the eight original patents (Dkt. No. 313 at 2 n.2; Dkt. No. 379 at 3 n.2), and a prior ruling of this Court has foreclosed all claims Rovi had asserted in connection with a fourth (see Dkt. No. 313 at 25–29; Dkt. No. 337-3). As things stand today, then, Rovi asserts thirty-four claims of four patents: the '034 patent, U.S. Patent Number 7,996,864, U.S. Patent

² Rovi Guides, Inc., acting alone, has also filed a companion suit, *Rovi Guides, Inc. v. Comcast Corp.*, No. 16 Civ. 9826 (S.D.N.Y.), which is now pending in this Court. That suit, which alleges the infringement of a distinct set of patents not at issue here, is currently stayed during the pendency of parallel administrative proceedings initiated before the International Trade Commission. (See No. 16 Civ. 9826, Dkt. Nos. 104–05, 114.) Comcast, in turn, has filed its own countersuit in this Court, *Comcast Corp. v. Rovi Corp.*, No. 16 Civ. 3852 (S.D.N.Y.), seeking, among other things, a declaration of noninfringement of the patents at issue in this case and the companion case. (See No. 16 Civ. 3852, Dkt. No. 1 ¶¶ 82–162). Comcast's countersuit is stayed during the pendency of the other two actions. (See No. 16 Civ. 3852, Dkt. No. 92.)

³ The operative complaint also raises claims against a number of entities that are alleged to have manufactured products that host Comcast's digital platforms. (Dkt. No. 68 ¶¶ 21–36.) Those claims have by now all been dismissed. (Dkt. Nos. 138, 171, 302.)

Number 8,713,595, and U.S. Patent Number 9,172,987. (Dkt. No. 337-11; Dkt. No. 379 at 3 n.2.)

On July 6, 2017, the parties submitted a letter identifying their disputes over the meaning of several terms contained in the patent claims at issue. (Dkt. No. 306-1.) The Court held a claim construction hearing on July 7, 2017 (*see* Dkt. No. 309), and issued an Opinion and Order on August 10, 2017, announcing its construction of the contested terms (Dkt. No. 303).

Meanwhile, as discovery in this case was proceeding, Comcast concurrently petitioned the Patent Trial and Appeal Board (“PTAB”) to initiate *inter partes* review (“IPR”) to assess the validity of all of the patent claims asserted in this suit.⁴ (Dkt. No. 337 at 2 & n.1.) Between May and September 2017, PTAB decided to institute IPR proceedings for each of the patent claims presently at issue in this case, except for the claims of the ’034 patent. (Dkt. No. 337 at 2 & n.2.) At that point, noting that “any of the conceivable potential outcomes of IPR [would] lead to a simplification of [this] case,” this Court resolved to stay this action pending the conclusion of the IPR proceedings. (Dkt. No. 365 at 6; *see also id.* at 10.) But on April 5, 2018, after Rovi agreed to voluntarily dismiss all its claims with respect to an IPR-bound patent that is closely related to the ’034 patent, this Court concluded that it was appropriate to bifurcate Rovi’s ’034 patent claims and dissolve the stay as to those claims. (Dkt. No. 379 at 3–6.)

Thereafter, on May 7, 2018, Comcast moved for summary judgment of noninfringement as to the ’034 patent claims. (Dkt. No. 385.) Rovi opposed the motion (Dkt. No. 393) and filed in support of its opposition, among other things, a declaration from its expert, Dr. Alan Bovik (the “Bovik Declaration”) (Dkt. No. 394-2), and a counterstatement of material facts that relied

⁴ IPR is a statutory review procedure that “allows private parties to challenge previously issued patent claims in an adversarial process before the Patent Office that mimics civil litigation.” *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1352 (2018).

in part on the declaration (Dkt. No. 395). On June 20, 2018, Comcast submitted its reply (Dkt. No. 399), as well as a motion to strike parts of the Bovik Declaration (and corresponding parts of Rovi’s counterstatement of material facts) that, in Comcast’s view, belatedly sought to advance infringement theories that had not been disclosed by the appropriate deadline (Dkt. No. 402). Comcast’s motion to strike, like its summary judgment motion, has been fully briefed (Dkt. Nos. 386, 393, 398, 402, 404, 405), and both motions are now fit for resolution.

B. The '034 Patent and the Claim Limitations at Issue

The '034 patent, titled “Method and System for Incremental Search with Reduced Text Entry Where the Relevance of Results Is a Dynamically Computed Function of User Input Search String Character Count,” was issued on February 21, 2012, with Veveo, Inc. designated as the assignee of all relevant rights. (Dkt. No. 389-2 (“Patent”) at 1.) Responding to a general proliferation of television content, the '034 patent seeks to describe “data search techniques, and more particularly, . . . techniques for performing searches for television content and channels and other items” that will enable a viewer to efficiently find programming of interest. (Patent col. 1:24–26; *see also id.* col. 1:36–43.) Specifically, it sets out a method and system for processing text that a user inputs into the search function of an electronic content guide and incrementally updating the list of returned results with each new character entered, “such that the user sees the desired results with the entry of the first few characters.” (Patent col. 2:23–25.)

As the '034 patent broadly summarizes the claimed invention, it is

a method and system . . . for processing a search request received from a user operating a text input device. The search request is directed at identifying a desired item from a set of items. Each of the items of the set of items has one or more associated terms. The method includes receiving a query input from a user directed at identifying the desired item. The query input comprises one or more characters input by the user on the text input device. As each character of the query input is received from the user, a group of items having one or more terms matching the characters received

thus far of the query input is dynamically identified. The items in this group of items are ordered based on relevance values of the terms matching the characters and on the number of characters of the query input used in identifying the group of items. Identification of items as ordered is transmitted to the user to be displayed on a device operated by the user.

(Patent col. 3:17–33.) An additional feature of the claimed invention is that

[t]he search space is divided into multiple subspaces, with the applicability or non-applicability to incremental search at any given instant being dynamically computed as a function of the number of characters entered by the user at that instant. This method enables selective relevance boosting (or suppression) of subspaces via configurable parameters appropriate to the application context of the search, with the boosting (or suppression) of subspaces occurring as a function of the number of characters entered by the user.

(Patent col. 2:45–54.)

Turning to the patent claims themselves, the '034 patent sets out thirty claims. (Patent cols. 10:33–14:22.) Rovi has produced a report from its expert, Dr. Bovik, contending that Comcast has infringed fourteen of these claims through its production, use, and licensing of an infringing search functionality (the “Search”) that Comcast deploys across four digital platforms that can be accessed through a variety of products.⁵ (Dkt. No. 394-3 (“Bovik Rept.”) ¶¶ 58–77; *see also* Dkt. No. 337-11.⁶) As with all patent claims, the claims at issue here contain certain limitations that delineate the scope of what, exactly, they protect, such that Comcast’s Search infringes any given claim only if each of that claim’s limitations “‘reads on,’ or in other words is

⁵ Rovi asserts that Comcast has infringed claims 1, 7, 8, 11, 13, 14, 15, 16, 22, 23, 26, 28, 29, and 30 of the '034 patent. (Dkt. No. 337-11.)

⁶ Where the Court relies on documents that have been filed under seal, the Court has concluded that the parties’ interests in continued sealing of the portions referenced in this Opinion and Order are insufficient to overcome the presumption of public access to judicial documents. *See Lugosch v. Pyramid Co. of Onondaga*, 435 F.3d 110, 119–20 (2d Cir. 2006).

found in” the Search, or if “equivalents of those limitations” are present in the Search. *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1345 (Fed. Cir. 2002).⁷

Here, Comcast points to two limitations that are common to each of the fourteen asserted claims and that, it contends, its Search does not embody. (Dkt. No. 386 at 3–4; *see also id.* at 1 n.2.) First, it invokes the claims’ limitation to methods or systems that, “for each [searchable] item, associat[e] a set of terms to describe the item and assign[] a relevance value for each term based on a relevance of the term in identifying the item, the terms associated with the items being organized into searchable subspace categories, each subspace category having a relevance bias value.” (Patent col. 10:41–46; *see id.* col. 12:19–24.) Second, it invokes the claims’ limitation to methods or systems that “adjust[] the relevance value assigned to at least one of the terms associated with one or more of the items retrieved in response to . . . one or more user-entered prefixes, wherein the adjusting of the relevance value is based on the count of the number of text characters received from the user.” (Patent col. 11:7–12; *see id.* col. 12:60–63.)

This Court has already construed some of the language contained in these limitations. First, the Court has determined that “prefixes,” as used in the ’034 patent’s claim language, refers to “variable length strings containing characters of a word running from the first character of the word.” (Dkt. No. 313 at 24.) Second, the Court has construed “term” to refer to “one or more ordered or unordered words that are part of the title, keyword, or any other portion of the meta-content of an item.” (Dkt. No. 313 at 25.) Third, the Court has concluded that the term “subspace categories” shall be given its plain and ordinary meaning. (Dkt. No. 313 at 32.) And

⁷ Because this is “a case arising under the patent laws,” this Court follows Federal Circuit precedent. *Radiancy, Inc. v. Viatek Consumer Prods. Grp., Inc.*, 138 F. Supp. 3d 303, 314 (S.D.N.Y. 2014) (quoting *Foster v. Hallco Mfg. Co.*, 947 F.2d 469, 475 (Fed. Cir. 1991)).

finally, the Court has held that “relevance bias value” as used here refers to a “value based on the preference of one subspace relative to one or more of the other subspaces.” (Dkt. No. 313 at 33.)

In seeking summary judgment of noninfringement, Comcast contends that its Search indisputably lacks aspects of each of the two limitations at issue. (Dkt. No. 386 at 1–3.) Rovi reads the record differently, arguing that a reasonable factfinder could conclude that Comcast’s Search fully embodies both limitations, or their equivalents. (Dkt. No. 393 at 1–2.) The Court will now address this disagreement and, in doing so, will also address Comcast’s motion to strike portions of the Bovik Declaration (and related portions of the counterstatement of material facts) that Rovi has introduced in opposition to summary judgment.

II. Legal Standards

A. Summary Judgment

Under Federal Rule of Civil Procedure 56, a court “shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). While “[s]ummary judgment must be granted against a party who has failed to introduce evidence sufficient to establish the existence of an essential element of that party’s case, on which the party will bear the burden of proof at trial,” it is the party moving for summary judgment that “has the initial responsibility of identifying the legal basis of its motion, and of pointing to those portions of the record that it believes demonstrate the absence of a genuine issue of material fact.” *Novartis Corp. v. Ben Venue Labs., Inc.*, 271 F.3d 1043, 1046 (Fed. Cir. 2001).

In the context of a patent infringement suit, “the ultimate burden of proving infringement rests with the patentee,” so “an accused infringer seeking summary judgment of noninfringement may meet its initial responsibility either by providing evidence that would preclude a finding of infringement, or by showing that the evidence on file fails to establish a material issue of fact

essential to the patentee’s case.” *Id.*; *see also TechSearch, LLC v. Intel Corp.*, 286 F.3d 1360, 1369 (Fed. Cir. 2002) (“Summary judgment of noninfringement is . . . appropriate where the patent owner’s proof is deficient in meeting an essential part of the legal standard for infringement, because such failure will render all other facts immaterial.”). Ultimately, summary judgment on an infringement claim “is appropriate when it is apparent that only one conclusion as to infringement could be reached by a reasonable jury,” even after all reasonable inferences are drawn in favor of the non-movant. *TechSearch*, 286 F.3d at 1369.

B. Motion to Strike

Federal Rule of Civil Procedure 26 provides that a party seeking to introduce the opinions of an expert must, during the course of discovery, provide a written report that discloses, among other things, “a complete statement of all opinions the witness will express and the basis and reasons for them.” Fed. R. Civ. P. 26(a)(2)(B)(i). If, after a party has filed its expert report, the party wishes to supplement the “information included in the report and . . . information given during the expert’s deposition,” the party must do so prior to the deadline the court has set for pretrial disclosures. Fed. R. Civ. P. 26(e)(2). And, under this Court’s Local Patent Rules, this same deadline applies to any effort to supplement the infringement contentions that the Local Patent Rules require any party claiming patent infringement to serve on its opponents. S.D.N.Y. Local Patent R. 9; *see also* S.D.N.Y. Local Patent R. 6.⁸

If a party fails to comply with these disclosure deadlines, a district court may, in its discretion, sanction that party by striking any belatedly introduced opinions or infringement

⁸ Although discovery began while this case was pending in the Eastern District of Texas (*see, e.g.*, Dkt. No. 113), the Scheduling Order that this Court issued following the case’s transfer refers to this Court’s Local Patent Rules (*see* Dkt. No. 199). In any event, no party has argued that any differences between the two courts’ rules would bear on Comcast’s motion to strike.

theories. *See O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355, 1369 (Fed. Cir. 2006). Accordingly, a court will generally strike portions of an expert declaration that has been submitted in connection with a summary judgment motion following the disclosure deadline if those portions “exceed[] the bounds of the expert’s report,” but not if they are “within the scope of the initial expert report.” *Advanced Analytics, Inc. v. Citigroup Glob. Mkts, Inc.*, 301 F.R.D. 31, 36 (S.D.N.Y. 2014) (first quoting *Morritt v. Stryker Corp.*, No. 07 Civ. 2319, 2011 WL 3876960, at *5 (E.D.N.Y. Sept. 1, 2011); then quoting *Cedar Petrochemicals, Inc. v. Dongbu Hannong Chem. Co.*, 769 F. Supp. 2d 269, 279 (S.D.N.Y. 2011)).

III. Discussion

In support of its summary judgment motion, Comcast argues that, even accepting the views of Rovi’s expert as to how the Search operates, no reasonable juror could conclude that the Search infringes the ’034 patent. As explained above, Comcast identifies two limitations that are common to all of the asserted ’034 patent claims and that, it argues, the Search does not embody. The Court addresses each of the referenced limitations in turn.

A. Adjusting a Relevance Value Based on a Count of the Number of Characters

Comcast’s first argument is that, even if the Search operates exactly as Rovi says it does, no reasonable juror could find that the Search “adjust[s] the relevance value assigned to at least one of the terms associated with one or more of the items retrieved in response to . . . one or more user-entered prefixes, wherein the adjusting of the relevance value is based on the count of the number of text characters received from the user.” (Patent col. 11:7–12; *see also* Dkt. No. 386 at 9–20.) And because this limitation constrains the scope of every ’034 patent claim Rovi asserts, Comcast contends, the Search cannot infringe those claims as a matter of law.

Comprehending this claim limitation requires a bit of background. As a starting point, the ’034 patent uses the word “items” to refer to certain searchable entities. For example, if a

television viewer were searching a digital content guide like that of Comcast, the “items” would be the units of content that might appear in response to the user’s search — *e.g.*, television channels, television series, or specific television episodes. (*See, e.g.*, Bovik Rept. ¶ 158.) To fall within the scope of the asserted claims, each item must have an “associat[ed] . . . set of terms to describe the item.” (Patent col. 10:41; *see id.* col. 12:19.) And, under the claim construction this Court has already adopted, those terms must be “one or more ordered or unordered words that are part of the title, keyword, or any other portion of the meta-content of an item.” (Dkt. No. 313 at 25.) So, for example, for the television series *Seinfeld* (an item), associated terms might correspond to the title of the show or an episode (*e.g.*, “*Seinfeld*,” “*Contest*,” “*Soup Nazi*”), a cast member’s name (*e.g.*, “*Jerry Seinfeld*,” “*Julia Louis-Dreyfus*,” “*Michael Richards*”), or some other concept associated with the show (*e.g.*, “*Dark Humor*,” “*Kramer*,” “*777 Film*”).

(Patent fig. 6A.)

The asserted patent claims further provide that each term must be assigned “a relevance value . . . based on a relevance of the term in identifying the item.” (Patent col. 10:42–43; *see id.* col. 12:19–21.) And the claim limitation at issue here explains that the relevance value assigned to one or more terms must be adjusted in response to the user’s entry of characters into a search function and, specifically, in response to “the count of the number of text characters received from the user.” (Patent col. 11:11–12; *see id.* 12:61–62.) As Rovi represented to the PTAB, this limitation requires “adjusting the relevance weights of descriptive items associated with the search results based on the number of text characters received from the user and reordering at least a portion of the search results presented to the user based on the adjusted relevance weights.” (Dkt. No. 389-6 at 8.) Without this reordering, Rovi has further explained, “highly popular results [would] monopolize the most desirable positions in the presentation order,

thereby ‘occluding’ less popular results” as a user continued to enter text into a search function, even though “[b]y typing more characters, the user has indicated that she is not interested in the most popular results on a character-by-character basis.” (Dkt. No. 389-6 at 8–9.)

By way of illustration, take the term “Game” as it might apply to the hit television series *Game of Thrones*. When a user has typed “G” or “Ga” or “Gam,” the item’s popularity and the fact that the user has entered a prefix of a term that is closely associated with the item might conspire to put *Game of Thrones* toward the top of the list of returned results. But by the time the user reaches four characters — “Game” — she has likely already been offered *Game of Thrones* and declined to select it. At that point, perhaps, the relevance value of the term “Game” in relation to other, less popular content items — such as the 1997 Michael Douglas thriller *The Game* — or content items that are less closely associated with the term — such as the 1992 baseball film *A League of Their Own* — might get a boost, affecting those items’ placement relative to *Game of Thrones*.

Rovi maintains that, at the time it filed suit, Comcast’s Search embodied this limitation in two ways. (Dkt. No. 393 at 1–2.) First, Rovi claims that the Search “applied a numerical count” of the characters entered by the user and, based on that count, adjusted one of the variables that influenced the ranked order of displayed content items. (*Id.*) Second, although Rovi accepts that Comcast discontinued this numerical count in January 2017, Rovi contends that the Search thereafter continued — and continues — to “track[] the incremental input of text characters entered by the user and adjust[] the relevance values of corresponding terms as the number of characters incrementally increase[s].” (Dkt. No. 393 at 2.) The Court first addresses the “numerical count” that was supposedly built into the Search prior to January 2017 and then goes

on to address the “incremental adjustment” that the Search has supposedly performed at all relevant times.

1. Numerical Count (Prior to January 2017)

Rovi first maintains that, prior to January 2017, Comcast’s Search adjusted the relevance value of the terms associated with the retrieved content items “based on the count of the number of text characters received from the user” (Patent col. 11:10–12) because a numerical count of the user-entered characters factored directly into the formula that governed the rank-ordering of returned content items (*see* Dkt. No. 393 at 14–16).

Understanding this argument requires a bit of a dive into the Search’s inner workings. At the most basic level, the Search assigns each content item an overall score, computed according to a specified formula, that informs where the item falls in the list of content items displayed to a user. (Bovik Rept. ¶ 130.) Some elements of the formula that dictates an item’s overall score remain constant in the short term and so will not change as a user extends a query. Thus, for example, an element of the formula that corresponds to an item’s overall popularity or novelty would remain constant as a user extends a query from “G” to “Ga” to “Gam.” (*See* Bovik Rept. ¶¶ 131, 134.) Other elements, though, change based on the characters the user has entered. (*See, e.g.*, Bovik Rept. ¶ 133.) One such variable, “Match Score,” is intended to represent how well an item matches a user’s query. (*Id.*) And the role that an item’s Match Score plays in determining the item’s overall score is in turn influenced by another element, known as “Match Score Factor.” (*See* Bovik Rept. ¶ 130.) Although Match Score Factor is now set at a constant value, prior to January 2017 it varied based on the number of characters entered by the user. (*See* Dkt. No. 394-7 at 39:2–8, 145:20–146:17.)

Thus, Rovi contends, prior to January 2017 the Search “adjusted the relevance value of terms in response to a count of the number of text characters received from the user” and so fit

within the relevant claim limitation. (Dkt. No. 393 at 14; *see also* Dkt. No. 394-2 (“Bovik Decl.”) ¶¶ 26–28.) Comcast, of course, disagrees with Rovi’s analysis of Match Score Factor. While accepting that Match Score Factor was indeed adjusted “based on the count of the number of text characters received from the user” prior to 2017 (Patent col. 11:10–12; *see also* Dkt. No. 398 at 6), Comcast argues that Match Score Factor cannot be a “relevance value assigned to at least one of the *terms* associated with” an item (Patent col. 11:7–8 (emphasis added)) because Match Score Factor is assigned to Match Score, which is not a term (Dkt. No. 398 at 6).⁹

Nothing in the claim language, though, requires that a relevance value be assigned *only* to terms. Thus, the fact that Match Score Factor affects the weight given to Match Score in arriving at an item’s overall score does not disqualify Match Score Factor from being a relevance value as long as it is *also* assigned to at least one term “based on a relevance of the term in identifying [an] item.” (Patent col. 10:42–43.) And the record could reasonably be read to suggest that Match Score Factor satisfies this requirement. Say, for example, that as a user’s query extends from “G” to “Ga” to “Gam,” Match Score Factor adjusts from “1” to “2” to “3.” In this scenario, the Match Score Factor value assigned to a term (“Game”) reflects the significance of that term — as opposed to, perhaps, exogenous factors such as novelty or popularity — in identifying which item is most likely the intended target of the user’s query. As Rovi puts it, “the more characters in the count, the greater the [term’s] relevance.” (Dkt. No. 393 at 16.) Thus, the existing record is insufficient to foreclose all factual dispute as to whether the pre-2017 version

⁹ Comcast also argues that, to the extent Rovi seeks to identify some element other than Match Score Factor as the claimed relevance value, it has not articulated its infringement theory with the requisite clarity. (Dkt. No. 398 at 6–7.) The Court agrees and understands Rovi to be arguing that Match Score Factor itself — and not some unspecified “different value[] associated with [Match Score Factor]” (Bovik Decl. ¶ 27) — is the claimed relevance value (*see* Dkt. No. 393 at 16 (referring to “the [Match Score Factor] relevance value” that is “assigned to each term based on the relevance of the term in identifying [an] item”)).

of the Search, by adjusting Match Score Factor in response to the length of a user’s query, “adjust[ed] the relevance value” of a term associated with an item “based on the count of the number of text characters received from the user.” (Patent col. 11:7–11.)

Be that as it may, Comcast argues that any such dispute is irrelevant because even if Rovi is correct that the pre-2017 version of Match Score Factor satisfied the relevant claim limitation, Rovi’s efforts to assert this theory of infringement come too late. In Comcast’s telling, Rovi’s final infringement contentions and expert report never identified the pre-2017 adjustment of Match Score Factor as the adjustment of a “relevance value” within the meaning of the ’034 patent. (Dkt. No. 402 at 3–4.) Instead, Comcast believes that Rovi raised this theory for the first time in the Bovik Declaration submitted in opposition to summary judgment, and Comcast therefore asks the Court to strike the portions of the Bovik Declaration that introduce this theory, along with the corresponding portions of Rovi’s counterstatement of material facts. (*Id.*)

While acknowledging that Rovi’s earlier submissions could more clearly have expressed Rovi’s intent to argue that the pre-2017 adjustment of Match Score Factor was the adjustment of a relevance value, the Court denies Comcast’s motion to strike the summary judgment materials that spell this argument out. Certainly, Rovi’s final infringement contentions and expert report, both of which were submitted in August 2017 (*see* Dkt. No. 402 at 1), focused on the Search’s then-current version — *i.e.*, the version that had set Match Score Factor equal to a constant and had thus eliminated the potentially infringing numerical count. But Rovi’s position in these filings was that the Search “*remain[ed]* infringing” *notwithstanding* “th[e] slight modification” made to Match Score Factor. (Bovik Rept. ¶ 176 (emphasis added).) Rovi’s expert report, for example, opined that the Search continued to embody the limitation at issue even after Comcast had adopted “an alternative design where [the Search] assigns a single constant value to a factor

used in determining ‘relevance values,’” *i.e.* Match Score Factor, “that at one point changed based on the count of the number of characters received from the user.” (Bovik Rept. ¶ 315.) And Rovi’s infringement contentions put the point in much the same way. (Dkt. No. 402-3 at 30–31.) The Court therefore concludes that Rovi’s infringement contentions and expert report did raise, albeit obliquely, the theory that the pre-2017 version of Match Score Factor operated to adjust the relevance value of a term based on a count of the number of user-entered characters.

Of course, this sort of backdoor reference might not be sufficient in all cases to withstand a motion to strike a later elaboration. Here, though, the record reflects that, even prior to the Bovik Declaration, Comcast was aware that Rovi viewed the pre-2017 Match Score Factor as satisfying the relevant claim limitation. Indeed, Comcast’s own corporate witness testified that the January 2017 decision to set Match Score Factor equal to a constant value in the first place was “conceived or implemented in connection with th[is] litigation.” (Dkt. No. 394-7 at 27:16–19; *see also id.* at 27:20–28:6.) And Rovi’s expert, Dr. Bovik, testified in no uncertain terms at his deposition that the pre-2017 Match Score Factor “was a relevance value.” (Dkt. No. 394-4 at 159:11–13.) To be sure, “deposition testimony on a topic does not cure a failure to provide Rule 26 disclosure.” *Commercial Data Servers, Inc. v. Int’l Bus. Machs. Corp.*, 262 F. Supp. 2d 50, 62 (S.D.N.Y. 2003). But where, as here, an expert’s deposition unambiguously presents an infringement theory that is included, if only generally, in the initial expert report, this Court will not order the “drastic remedy” of striking all later elaborations of the theory on the basis of that initial haziness. *Wechsler v. Hunt Health Sys., Ltd.*, 381 F. Supp. 2d 135, 155 (S.D.N.Y. 2003) (quoting *McNerney v. Archer Daniels Midland Co.*, 164 F.R.D. 584, 587 (W.D.N.Y. 1995)).

Ultimately, the Court cannot conclude that Comcast is entitled to judgment as a matter of law on the question of whether the Search, as it existed prior to January 2017, “adjust[ed] the

relevance value assigned to” a term, “wherein the adjusting of the relevance value [was] based on the count of the number of text characters received from the user.” (Patent col. 11:7–12.)

2. Incremental Adjustment

As mentioned above, by the end of January 2017 Comcast’s Search no longer adjusted Match Score Factor based on the number of characters a user had entered as part of a search query. Rovi maintains, however, that even despite this change the Search continues to adjust the relevance value assigned to at least one term “based on the count of the number of text characters received from the user” (Patent col. 11:10–12) because it “incrementally adjusts the retrieved relevance values of terms, as each text character is received from [a] user” (Bovik Decl. ¶ 29).

This theory runs as follows. First, Comcast’s Search pre-processes and indexes every potential search query that could be associated with a given item. (Bovik Decl. ¶ 30.) So, for example, the content item *Game of Thrones* would have an associated index that contains “G,” “Ga,” “Gam,” and so forth. Next, each prefix is assigned a specific value (e.g., “G”=2, “Ga”=6, etc.), which factors into the Match Score that the item receives in response to a query consisting of that prefix. (Bovik Decl. ¶ 31.) Because the term associated with the query (“Game”) will exert a different level of influence on the Match Score of the related item (*Game of Thrones*) — and, thus, on the item’s ultimate placement in the list of returned results — depending on which characters the user has entered (e.g., “G” versus “Ga” versus “Gam”), Rovi maintains that, even after January 2017, the Search “still incrementally counts the number of text characters received and adjusts the relevance of the prefixes and terms” based on that count. (Dkt. No. 393 at 16.)

In response, Comcast first seeks to strike the portions of the Bovik Declaration (and of Rovi’s counterstatement of material facts) that explain this theory, arguing that aspects of this theory were not disclosed in timely fashion. (Dkt. No. 402 at 4–5.) Specifically, Comcast seeks to strike the portions of the declaration that suggest that each indexed prefix is assigned its own

value, such that an item’s Match Score changes with each new character entered. (See Dkt. No. 402-1 ¶¶ 29–36.) In Comcast’s telling, Rovi’s infringement contentions and expert report never made this claim. (Dkt. No. 402 at 4–5.) Instead, Comcast maintains, Rovi’s earlier disclosures, in describing the effect that the pre-indexed search queries have on an item’s Match Score, claim only that a query might affect an item’s Match Score differently depending on whether the query, for example, matches the item’s title exactly, matches characters that appear at the start of the item’s title, or matches a whole word that appears in the item’s title. (*Id.*) Comcast takes the view, then, that Rovi is limited to arguing that it is these supposed “boost values” assigned to a select subset of prefixes — and not some other value assigned to *every* prefix — that represent the “relevance values” described in the claim limitations of the ’034 patent. (Dkt. No. 405 at 2.)

Here too, the Court declines to strike the challenged portions of Rovi’s filings. Even if the Court accepts that the “incremental adjustment” infringement theory explained in the Bovik Declaration represents a meaningful departure from the “boost value” infringement theory that Rovi had previously disclosed, there is no need to strike the newly articulated theory from the case. As the Court will explain, even with the benefit of its arguably tardy “incremental adjustment” theory, Rovi has failed to identify any genuine dispute of fact as to whether the present version of the Search embodies the claim limitation at issue.

The fundamental problem with Rovi’s position is that the assignment of predetermined values to indexed search queries does not satisfy the claim limitation under discussion unless those values are “based on the count of the number of text characters” contained in the queries. (Patent col. 11:10–11.) And Rovi has identified no evidence showing that this is the case. First, Rovi points to a document that, it says, displays values assigned to possible queries associated

with the content item *Disney's Descendants 2*.¹⁰ (Bovik Decl. ¶ 31.) But this unelaborated document provides no insight into how the value assigned to any given query is determined and, critically, whether the value is influenced by the query's length. If anything, the document depicts queries of varying lengths — “D,” “Di,” “Dis,” “Disn,” “Disne,” and “Disney,” for example — that are all assigned identical values. (*Id.*) Thus, to the extent that the document provides evidence of anything, it shows only that user queries of different alphanumeric content, irrespective of the number of characters, might correspond to different relevance values.

Next, Rovi points to evidence that the value assigned to any given prefix is affected by, among other things, whether the prefix matches an item's full title, characters appearing at the beginning of the title, a full word that appears within the title, or part of a word that appears in the title. (Bovik Decl. ¶ 32.) But these adjustments, too, depend on the *content* of the user query and not on a “count of the *number* of text characters” contained in the query. (Patent col. 11:11 (emphasis added).) To return again to *Game of Thrones*, Rovi's evidence suggests that the prefix “Gam” might have a higher pre-indexed value than the prefix “Thr” does, but it does not suggest that the prefixes “Thr,” “Thro,” and “Thron” are valued differently from one another. And to the extent that the evidence suggests that the prefix “Game” might be valued more highly than the prefix “Gam” is, the reason is that the former prefix completes a full word contained in the title of the searched-for item and not that it contains a greater number of characters *per se*.

¹⁰ In connection with its reply brief, Comcast has submitted a declaration in which its director of Software Development and Engineering attests that the values shown in the document upon which Rovi relies are not (and never have been) used in calculating an item's Match Score or any other variable that influences an item's overall score for purposes of rank ordering. (Dkt. No. 401.) Because the Court concludes that the document at issue would not create a dispute of material fact even if the Court assumes, favorably to Rovi, that the values in the document do factor into the calculation of an item's Match Score, the Court need not address this argument.

Of course, the above analysis rests on an important assumption. Specifically, it assumes that an adjustment of a relevance value “based on the count of the number of text characters received from the user” (Patent col. 11:10–12) means, as Comcast puts it, “exactly what it says,” *i.e.*, that the adjustment is “based on an actual ‘count’ of the ‘number’ of characters” (Dkt. No. 386 at 12). Rovi, though, disputes this interpretation. According to Rovi, even if the value assigned to any given term is not computed as a direct function of the number of characters a user has entered in searching for an associated item, a search feature nonetheless satisfies the relevant limitation if it, like the Search here, “incrementally counts the number of text characters received [from a user] and adjusts the relevance of the prefixes and terms” in response, thereby “alter[ing] the search results based on the count that exists after each character is input.” (Dkt. No. 393 at 16.)

The proper construction of a disputed patent claim is a legal issue for the court to resolve. *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1318 (Fed. Cir. 2016). Generally, claim language is presumed to bear its “‘ordinary and customary meaning,’ which is ‘the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.’” *Ruckus Wireless, Inc. v. Innovative Wireless Solutions, LLC*, 824 F.3d 999, 1002 (Fed. Cir. 2016) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc)). This ordinary meaning “may be determined by reviewing various sources, such as the claims themselves, the specification, the prosecution history, dictionaries, and any other relevant evidence.” *Id.* at 1002–03. Here, no party has argued that the disputed claim language ought to be assigned anything other than its ordinary meaning, nor has any party presented extrinsic evidence, such as an expert report, in support of its proposed construction. It therefore falls to the Court to construe the meaning of the disputed terms “in the context of the

patent” based on the “fully integrated written instrument” of the ’034 patent, along with the patent’s prosecution history. *Trs. of Columbia Univ. in the City of N.Y. v. Symantec Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016) (second quoting *Phillips*, 415 F.3d at 1315).¹¹

The Court agrees with the parties that the ’034 patent offers no indication that the phrase “based on the count of the number of text characters received from the user” (Patent col. 11:7–12) should be given anything other than its ordinary meaning. And the Court further concludes, in agreement with Comcast, that this phrase, as used in the ’034 patent, is most naturally read to refer to an actual *count* (i.e., “1,” “2,” “3”) of the *number* of user-entered characters. Rovi’s contrasting interpretation of the claim language is simply unpersuasive. As Rovi sees it, the fact that a term’s relevance value might happen to change as a user adds letters to a query necessarily means that the relevance value is changing “based on the count of the number of text characters received from the user.” (Patent col. 11:10–12.) Again, though, a search that adjusts a relevance value as a user moves from “Gam” to “Game” but not as a user moves from “Thr” to “Thro” adjusts the relevance value based on the *content* of the user-entered characters and not on the *number* of characters. To be sure, in some hair-splitting sense, a content-driven adjustment of this sort is “based on” the number of characters entered because the relevance boost assigned to any given query can kick in only after a user has entered the number of characters associated

¹¹ The Court acknowledges Rovi’s argument that this Court may not now engage in any interpretation of the disputed claim limitation — and presumably must therefore accept Rovi’s preferred construction — because Comcast failed to anticipate and seek a resolution of the present dispute during this case’s earlier claim construction proceedings. (Dkt. No. 393 at 13.) But Rovi cites no authority for its position, and the case law seems to accept that a case’s twists and turns will sometimes require a court to engage in claim construction all the way until the formulation of final jury instructions. *See, e.g., Conoco, Inc. v. Energy & Envtl. Int’l, L.C.*, 460 F.3d 1349, 1359 (Fed. Cir. 2006) (recognizing that “a district court may engage in claim construction during various phases of litigation,” though noting that “litigants waive their right to present new claim construction disputes if they are raised for the first time *after trial*” (emphasis added)).

with that query. But even if the Court were to adopt this sophistic approach to plain-meaning interpretation, Rovi would be hard-pressed to explain how an adjustment of a relevance value that is triggered by the entry of a specific set of characters is based not only on “the number of text characters received” but on “the *count* of the number of text characters received.” (*Id.*)

If there were any doubt on this point, the ’034 patent’s prosecution history makes clear that Rovi did indeed intend for the word “count” to place a meaningful gloss on the scope of the asserted claims. After the Patent and Trademark Office (“PTO”) rejected Rovi’s application for a version of the patent that described a relevancy adjustment based simply on “the number of text characters received from the user” (Dkt. No. 389-8 at 2), Rovi sought reconsideration, arguing as relevant that its invention could be distinguished from earlier incremental searches because the proposed patent “clearly describe[d] the ‘number of text characters’ as an enumeration of the characters in the user’s search string” (Dkt. No. 389-8 at 8). Rovi then filed an amended version of the claim language with the PTO, clarifying that the relevancy adjustment must be “based on the count of the number of text characters received from the user” (Dkt. No. 389-7 at 3) and expressing its view that this revision would “remove[] any ambiguity that may have existed regarding the meaning of this claim term” (Dkt. No. 389-7 at 11). As illustration, Rovi explained that, under its claimed invention, the order of the results returned in response to a user query of “app” would be ordered differently from the results returned after the user had gone on to extend the query to “appl” because “[t]he relevance values [would be] adjusted based on the count of the number of text characters (*i.e.*, four characters) received from the user.” (Dkt. No. 389-7 at 9.)

Both the claim language itself and Rovi’s explanation of that language during the ’034 patent’s prosecution, then, stand at odds with Rovi’s present position that a relevancy adjustment based on the changing *content* of a user’s query as the query extends from letter to letter satisfies

the claim limitation. *See Phillips*, 415 F.3d at 1317 (“[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention . . .”). Furthermore, Rovi’s current position seems to contradict the views it expressed before the PTAB when opposing Comcast’s petition for IPR. During the PTAB proceedings, Rovi opined that the “mere updating of search results” based on additional characters entered by a user “does not teach the claimed invention because the results may be based on the actual characters typed, not the count of characters.” (Dkt. No. 389-6 at 22–23.) Rovi cannot now persuade this Court that the relevant claim limitation encompasses a system that does *not* use the character count of a user query as a basis for adjusting the relevance value of the term associated with the query.¹²

In a final parry, Rovi argues that even if the incremental adjustment of a term’s relevance value based on the evolving content of a user’s query does not fall within the literal scope of the claim language, it nevertheless satisfies the relevant limitation under the doctrine of equivalents. (Dkt. No. 393 at 18–19.) Under that doctrine, a product that is not literally covered by a patent nonetheless infringes if “any differences between the claimed invention and the accused product [are] insubstantial,” *Brilliant Instruments, Inc. v. GuideTech, LLC*, 707 F.3d 1342, 1346 (Fed.

¹² In connection with Rovi’s representations to the PTO and PTAB, the Court has also considered whether to apply the doctrine of prosecution disclaimer. That doctrine “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution,” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003), but only if the patentee has “clear[ly] and unmistakabl[y]” indicated an intent to disavow that a patent claim carries a given meaning, *id.* at 1326; *see also Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1361 (Fed. Cir. 2017) (discussing prosecution disclaimer in relation to IPR). Ultimately, though, the Court need not decide whether Rovi’s statements to the PTO or PTAB sufficiently indicate such an intention because the Court does not rely on these statements to “narrow[] the ordinary meaning of [a] claim.” *Omega Eng’g*, 334 F.3d at 1324. Rather, the Court uses Rovi’s statements merely to confirm that the claim limitation at issue here should be construed to mean exactly what its clear language would ordinarily suggest.

Cir. 2013), or if, “for each claim limitation, . . . the accused product ‘performs substantially the same function in substantially the same way with substantially the same result as each claim limitation of the patented product,’” *id.* at 1347 (quoting *Crown Packaging Tech., Inc. v. Rexam Beverage Can Co.*, 559 F.3d 1308, 1312 (Fed. Cir. 2009)). To withstand a motion for summary judgment of noninfringement, a patent owner asserting equivalency must “provide particularized testimony and linking argument as to the insubstantiality of the differences between the claimed invention and the accused device or process, or with respect to the function, way, result test.”

Advanced Steel Recovery, LLC v. X-Body Equipment, Inc., 808 F.3d 1313, 1319 (Fed. Cir. 2015) (quoting *AquaTex Indus., Inc. v. Techniche Sols.*, 479 F.3d 1320, 1328 (Fed. Cir. 2007)).

The single piece of evidence Rovi has adduced in support of its equivalency argument is Bovik’s opinion that the Search “satisfies th[e] claim limitations related to character counts under the doctrine of equivalents by performing substantially the same function, in substantially the same way, to yield substantially the same result.” (Bovik Rept. ¶ 557; *see also* Dkt. No. 393 at 18–19.) And the sum total of Bovik’s stated basis for this opinion is that the Search

considers full title matches, matches at the beginning of the title, whole word matches, partial word matches, among other things, in computing [Match Score] with, for example, boost values that exist prior to a user’s search query and which are applied in calculating relevance values[,] [r]endering [the Search] operative in substantially the same way as what relevant claim limitations require.

(Bovik Rept. ¶ 557.) These “conclusory statements about equivalents” fail to create a genuine dispute of fact as to whether a count-based relevancy adjustment is truly equivalent to an incremental relevancy adjustment that is based on the specific content of a user’s query.

Motionless Keyboard Co. v. Microsoft Corp., 486 F.3d 1376, 1382 (Fed. Cir. 2007); *see also* *PACTIV Corp. v. S.C. Johnson & Son, Inc.*, 26 F. App’x 943, 948 n.5 (Fed. Cir. 2002) (disregarding for summary judgment purposes expert testimony that “simply recite[d] the

familiar function/way/result test and conclude[d] that the [accused product] infringe[d] the [asserted] patent by the doctrine of equivalents, without further analysis or explanation”). As noted above, Rovi has identified no evidence that the content-based boost values described by Bovik would treat the term “Thrones” as applied to the item *Game of Thrones* any differently in response to a query of “Thr,” a query of “Thro,” or a query of “Thron,” even though each of these queries contains a different character count. Without some elaboration as to how, at a minimum, these boost values operate in “substantially the same way” as the count-based relevancy adjustment described in the ’034 patent, Rovi — which bears the burden of establishing infringement — has not demonstrated that a genuine factual dispute exists for trial.

Comcast is therefore entitled to summary judgment of noninfringement of the ’034 patent with respect to the current version of the Search because no reasonable juror could conclude on the basis of the existing record that, after the January 2017 elimination of Match Score Factor’s numerical count, the Search adjusts relevance values “based on the count of the number of text characters received from the user” (Patent col. 11:10–12), or performs an equivalent function.

B. Subspace Categories with Relevance Bias Values

Having concluded that a genuine dispute of material fact exists as to whether the version of the Search that was in effect prior to January 2017 embodied the first of the claim limitations upon which Comcast relies in seeking summary judgment of noninfringement, the Court turns to the other claim limitation invoked by Comcast. To fall within the scope of the patent claims Rovi has asserted here, an accused product must organize “the terms associated with the [content] items . . . into searchable subspace categories, each subspace category having a relevance bias value.” (Patent col. 10:43–46; *see also id.* col. 12:22–24.) Comcast argues that no reasonable juror could conclude that the Search has ever embodied this limitation. (Dkt. No. 386 at 20–23.)

Before the Court turns to its analysis, a brief illustration of this limitation may be helpful. Returning to *Seinfeld*, recall that its associated terms can be slotted into categories such as title or episode terms (e.g., “Seinfeld”), actor terms (e.g., “Julia Louis-Dreyfus”), or thematic terms (e.g., “Dark Humor”). These categories (title or episode, actor, and thematic) represent the sort of subspace categories described in the ’034 patent. (See Patent fig. 6A, col. 7:42–49.) And under the claim limitation at issue, each of these subspace categories must have a “relevance bias value” (Patent col. 10:46), which this Court has construed to mean a “value based on the preference of one subspace relative to one or more of the other subspaces” (Dkt. No. 313 at 33). So, for example, if the title subspace holds a greater relevance bias value than the thematic subspace does, a search for “Dark” would, all else being equal, be more likely to yield the film *Donnie Darko* than to yield *Seinfeld*.

Rovi has explained through its expert, Dr. Bovik, how, in its view, the Search embodies the subspace categories and relevance bias values described in the relevant limitation. (Dkt. No. 393 at 19–25.) With respect to subspace categories, Bovik points out that the Search categorizes each item as, for example, a “movie, TV show, person, sports team, or network.” (Bovik Rept. ¶ 190.) And because an item’s associated terms, such as its title, form “part of the item stored during indexing,” Bovik explains, the terms are indexed within those categories as well. (Bovik Rept. ¶ 157.) Thus, because “items in [the Search] are categorized, for example, by entity type,” Bovik reasons, “the terms associated with the items are organized into subspace categories.” (Bovik Rept. ¶ 208.) Furthermore, because the formula by which the Search ranks the items returned in response to a user query contains a variable that “account[s] for the preference of one

type to one or more types of the entities,” Bovik maintains that the Search applies relevance bias values to its subspace categories, as the relevant limitation requires.¹³ (*Id.*)

Comcast offers two responses in opposition to this argument. Neither one persuades the Court that no genuine dispute exists as to whether the Search embodies the limitation at issue.

First, Comcast argues that Bovik’s analysis impermissibly elides the distinction between items and terms. (Dkt. No. 386 at 20–22.) As Comcast notes, the relevant limitation describes a system that organizes “the *terms associated* with the items,” and not the items themselves, “into searchable subspace categories.” (Patent col. 10:43–45 (emphasis added).) And, Comcast goes on, Rovi itself emphasized the distinction between items and terms during PTAB proceedings by opposing a claim construction that would have “require[d] that subspace categories contain *items* themselves.” (Dkt. No. 389-6 at 11.) But while the claim language does not “require[]” items to be grouped into subspace categories along with their terms (*id.*), neither does it *foreclose* such an arrangement, as long as the limitation’s requirements are otherwise satisfied. Comcast has simply failed to explain why the limitation at issue cannot be read to cover a system in which an item’s terms are all grouped together in a single subspace category that also includes the item.

Indeed, the ’034 patent’s specification confirms that the claimed subspace categories may be organized around item type. The specification describes a user who, after entering a query in search of a television show, is presented with a list of television *channels*. (Patent col. 9:30–31.) The reason for this uniformity, the specification explains, is that “the subspace biasing” in this example has “boost[ed] the majority of channel names over all other subspaces,” *e.g.*, television

¹³ Comcast faults Bovik for referring to the variable at issue by an outdated name in his expert report. (Dkt. No. 386 at 21 n.13.) But Bovik’s report made clear which variable he had identified as the claimed relevance bias value (*see, e.g.*, Bovik Rept. ¶¶ 132, 168), and Comcast cannot — and does not — claim to have been prejudiced by the mix-up in nomenclature.

shows. (Patent col. 9:31–34.) The specification thus anticipates an embodiment of the claimed invention in which subspace categories are defined by item type. (*See also, e.g.*, Patent col. 8:22–26 (explaining how “selective biasing” might “enable[] the ‘TV show’ subspace to get a boost . . . so that it can contend and supersede the low popularity channel names, or even all the channel names, if the biasing is appropriately set”)).) Because “claims must be construed so as to be consistent with the specification,” *Phillips*, 415 F.3d at 1316, the claims here may be read to cover a system in which a term is placed into a subspace category linked to its associated item.

Second, Comcast argues that even if a genuine dispute exists as to whether the Search employs subspace categories, no reasonable juror could conclude that the Search assigns the claimed relevance bias values to those categories. (Dkt. No. 386 at 22–23.) To be sure, Comcast concedes that the Search gives each item type a value, “Entity Boost,” that factors into the formula that governs the order in which items are listed in response to a user query. (Dkt. No. 386 at 23.) But Comcast argues that Entity Boost cannot be the claimed relevance bias value because it stays constant for any given item type and so cannot change as a user extends a query from character to character. (*Id.*) Although the claim language itself does not require that the relevance bias value be capable of such a change, Comcast believes that Rovi has narrowed the scope of the claim through statements it has made in PTAB proceedings. (Dkt. No. 386 at 22.)

Where a patent holder “has unequivocally disavowed a certain meaning to obtain his patent” or to shield it from IPR, “the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003); *see also Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1361 (Fed. Cir. 2017) (endorsing the view that “statements made by patent owners during an IPR can be considered for prosecution disclaimer”). Here, Rovi argued during

PTAB proceedings that the relevance bias value limitation distinguished its claimed invention from prior art that involved the “selection and de-selection of an entire content category” because “mere selection or de-selection is not enough” to meet the limitation. (Dkt. No. 389-6 at 13 (emphasis omitted)). Instead, Rovi explained, “a relevance bias value must be an actual quantifiable characteristic, such as a number, that allows for scalable, relative weighting of subspace categories.” (*Id.*) But nothing in this explanation unequivocally reflects an intent to disavow that the relevance bias value limitation covers a system, like Comcast’s, that gives a subspace category a numeric value, albeit a constant one, to reflect its relative significance.

Comcast, though, contends that Rovi narrowed the scope of the ’034 patent still further by stating that “a ‘relevance bias value’ as disclosed in the ’034 patent must be both dynamic and scalable.” (Dkt. No. 389-6 at 26.) In Comcast’s view, this statement disclaimed coverage of any system in which a numeric value assigned to a subspace category is constant, *i.e.*, not “dynamic.” (Dkt. No. 399 at 9–10.) When considered in context, however, the statement is best read as an imprecise reiteration of Rovi’s earlier, more fully elaborated view that the claimed relevance bias value must “allow[] for the dynamic, scalable *weighing of subspace categories*” and so must have “a quantifiable characteristic,” such as a numeric value. (Dkt. No. 389-6 at 2 (emphasis added).) After all, the statement at issue appears in the context of Rovi’s attempt to distinguish a prior invention that allowed a user to exclude certain returned results altogether, and it is soon followed by Rovi’s explanation that the ’034 patent “requires a specific, discrete ‘value’ for relative category weightings, not mere exclusion of categories by the user.” (*Id.*) Nothing in that discussion (beyond the single stray remark upon which Comcast has seized) suggests, still less unequivocally so, that the relevance bias value must *itself* be capable of dynamic adjustment.

The Court therefore concludes that Comcast has failed to show that no reasonable juror could construe the existing record to establish that the accused Search organizes “the terms associated with the [content] items . . . into searchable subspace categories, each subspace category having a relevance bias value.” (Patent col. 10:43–46.) This claim limitation thus cannot form a basis for granting summary judgment of noninfringement in favor of Comcast.

IV. Conclusion

For the foregoing reasons, Comcast’s motion to strike portions of the Bovik Declaration and Rovi’s counterstatement of material facts is DENIED, and Comcast’s motion for summary judgment of noninfringement as to the asserted claims of the ’034 patent is GRANTED in part and DENIED in part. Specifically, the Court grants summary judgment of noninfringement with respect to Rovi’s claims that the current version of Comcast’s Search infringes the ’034 patent and denies summary judgment of noninfringement with respect to Rovi’s claims that the version of Comcast’s Search that was in effect prior to January 2017 infringed the ’034 patent.

The parties are directed to file a joint letter within twenty-one days of the date of this order, informing the Court of the status of the ongoing PTAB proceedings and advising the Court whether trial of the ’034 patent claims as to which summary judgment has not been granted should be stayed pending the conclusion of those proceedings.

The Clerk of Court is directed to close the motions at Docket Numbers 385 and 402.

SO ORDERED.

Dated: September 30, 2019
New York, New York



J. PAUL OETKEN
United States District Judge